



DKSEE

the CARRIER.....

Published Monthly by the Mount Diablo Amateur Radio Club

MDARC FIELD DAY CALL W6CX
VOLUME XXXIV

2M REPEATER W6CX/R 220 REPEATER W6CX/R
NOVEMBER 1986

MEMORIAL CALL SIGN W6LOW
ISSUE NO. 11

NOV. MDARC CLUB CALENDAR

21 NOV. MDARC GENERAL MEETING

25 NOV. MDARC BOARD MEETING

GOBBLE GOBBLE GOBBLE

HAPPINESS IS A TURKEY
27 NOVEMBER 1986

HAPPY THANKSGIVING !!



GENERAL MDARC NET Thurs.
1930 PST. W6CX 147.06/+R
PARKY NET:
Every night 3895 (+ - QRM) 2200 PST
NON/VHF 1930 PST
OCRA Net 1935 PST. Mon.147.735/-R
OCATV Net Thurs.2000 PST 146.06/+R
RACES/ARES Weekly Thurs.
Central 1900 PST 145.68/S
East 1900 PST 146.54/S
West 1900 PST 145.11/-R
South 1845 PST 147.55/S
All nets QSY to 147.735/-R
1920 Hrs.PST.

MEETING NOTICE

THIS MONTH'S MEETING WILL BE HELD AT
THE GRACE PRESBYTERIAN CHURCH
2100 TICE VALLEY BLVD.
WALNUT CREEK
8:00 P.M.

The Rocky Ridge Repeater Group
of MDARC meets every other
month. NEXT MEETING: NOV. 19,
1986. LOCATION: Don Protzman
K6LXW 134 Maricopa Dr.Pleasant
Hill. New members are welcomed
and long time members are
brought up to date on repeater
technology.

SUPPORT YOUR REPEATERS.

EDITOR: CARSON C. TAYLOR K6TI 48 MARIPOSA CT. DANVILLE,CA. 945262

Assistance: Florence Lortsher

PRESIDENT	WB6PQM	SCOTT MILES	12 BIG OAK CT. W.C.	934-6081
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SECRETARY	KB6FHE	DIANE WHITTEN	34 SANTA LUCIA CT. P.H.	676-6718
TREASURER	W16Y	MARY BRADSHAW	21 ALTAMOUNT DR. OR.	376-0762
E.C.	W6ZHY	HANK BERRIMAN	42 OAK KNOLL CT. W.C.	934-9659
BOARD	KT6Y	JAY CALDIS	2890 GRANDE CAMINO	939-1893
BOARD	KA6IVF	JIM HOUSE		372-0345

DEADLINE FOR NEXT ISSUE: ARTICLES, CLASSIFIED ADS, ETC. by November 30, 1986

NEXT BOARD MEETING AT K6TI QTH: TUESDAY NOVEMBER 25, 1986

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THE HAM SHACK OF K6TI

THE MT. DIABLO RADIO CLUB HAS, IN THE PA ST, BEEN KNOWN FAR AND WIDE FOR ITS OUTSTANDING CONTRIBUTIONS TO AMATEUR RADIO, PUBLIC SERVICE, AND EMERGENCY PREPAREDNESS. THIS REPUTATION WAS MADE KNOWN TO THE REST OF THE WORLD BY ITS AWARD WINNING NEWSLETTER APTLY ENTITLED "THE CARRIER". THESE WERE THE DAYS OF COOPERATION, DEDICATION AND ALWAYS THE WILLINGNESS TO SERVE. IT SEEMS THAT MDARC HAS FALLEN ONTO HARD TIMES. THOSE WHO HAVE BEEN SERVING ARE IN GREAT NEED OF REST BUT WHO IS TO TAKE THEIR PLACE? NO ONE WANTS TO BE INVOLVED ALTHOUGH WITH OVER TWO HUNDRED MEMBERS IT WOULD SEEM THERE MUST BE SOME WHO WOULD AND COULD TAKE UP THE TASKS THAT MAKE AN ORGANIZATION RUN. MANY COMPLAIN BUT FEW STEP FORWARD. EVERYONE WANTS TO ENJOY THE CAMARADERIE OF A FINE CLUB BUT NOT MANY ARE WILLING TO PUT FORTH THE EXTRA EFFORT TO MAKE THIS POSSIBLE. AS FOR THE NEWSLETTER THAT BECAME FAMOUS, IT WAS ABOUT TO BECOME EXTINCT. HAVING BEEN BORN OF PARENTS WHO STARTED AND PUBLISHED A WORLD FAMOUS NEWSPAPER, IT WAS IMPOSSIBLE FOR ME TO SEE THIS HAPPEN. SO--YOU ARE STUCK WITH ME AS THE EDITOR AND WE WILL "GIVE IT A GO". HOWEVER, UNDERSTAND ONE FACT, ONLY YOU CAN MAKE IT HAPPEN. YOUR CONTRIBUTIONS OF NEWS, YOUR IDEAS OF WHAT YOU WANT TO SEE IN YOUR CLUB PAPER, YOUR ALERT REPORTING OF HAPPENINGS THAT MAKE FOR INTERESTING READING ARE THE ONLY THINGS THAT WILL SAVE IT. I WILL ENDEAVOR TO PUT IT TOGETHER BUT YOU ARE THE NEWS.

YOU ARE HEREBY DEPUTIZED, ALL OF YOU, AS REPORTERS. PUT YOUR "PRESS CARD" IN YOUR IMAGINARY HAT AND REPORT THE NEW STATION YOU ARE BUILDING, THE GREAT JOB YOU SAW DONE BY A HAM IN AN EMERGENCY OR THAT GREAT IDEA YOU HAVE TO SOLVE ALL OUR PROBLEMS. LET'S HAVE THEM AND LET'S TURN THIS CLUB AROUND FROM A SOCIAL AFFAIR TO A VITAL ENTITY THAT IS CONTRIBUTING TO THE FUTURE OF COMMUNICATIONS AS THE HAMS HAVE ALWAYS DONE.

IT WILL TAKE ME A BIT TO GET IN GEAR SO PLEASE BE PATIENT AND HELP BY PHONING OR WRITING AND TELL ME WHAT YOU WANT AND WHAT YOU KNOW. MY PHONE IS 820-5297. ADDRESS IS 48 MARIPOSA CT. DANVILLE 94526. YOU CAN ALSO FIND ME ON BOTH OUR REPEATERS, ON PACKET AND ON SOUTH C.C.RACES NET, THURSDAY 1845 HOURS LOCAL TIME AND FREQUENCY OF 147.550 SIMPLEX.

THANK YOU IN ADVANCE FOR THE HELP I KNOW YOU WILL GIVE. JUST REMEMBER "THE CARRIER" IS YOURS.

K6TI CARSON



Santa Claus is coming!

Don't forget to send your reservation slips and money in for the Potluck Christmas Party on December 21st. Reservations are coming in rapidly, so be sure you get yours in early to be assured of being able to participate in the fun and fellowship of the evening.

Make checks payable to MDARC (\$1.00 per person). Send check and reservations to:

George L. Roush (WB6OFR)
2116 Athene Drive
Concord, California 94519

If any questions, call George at (415) 687-0912.

FRIDAY OCTOBER 17, 1986

The business portion of the meeting was very short since this was Auction Night and the amount of gear for sale was truly awesome. Scott Miles, W6PQM, called the meeting to order and announced that Carson C. Taylor, K6TI, is our new Editor of "The Carrier". Art Mayhoff, VE2AQV, did an outstanding job as Auctioneer. We are fortunate to have someone with his talent to run our auctions. "Thank you, Art." There was a record number of sellers and buyers and it was indeed very successful for everyone. Scott Thomas, N6LGB, is to be congratulated on the fine organizational work done by him and his crew. The November program is to be a SURPRISE. The hour was late and everyone had spent their money by the time the meeting was adjourned.

Respectfully submitted,
Diane Whitten, KB6FHE

MDARC BOARD MEETING

Meeting was brought to order at 2030 hours by President Scott Miles. All Board Members were present. President Scott Miles advised that insurance has been secured for the club which meets the conditions necessary for continued use of church properties. He also pointed out that the bylaws as printed in our recent directory show some discrepancies between the written law and common practice. Don Peattie, WB6TEE, and Dick Brown, KT6X, have been appointed to research the matter. The Board's decision is to reprint the correct bylaws in a future edition of the Carrier.

NEXT ON THE AGENDA WERE THE RESULTS OF THE NOMINATING COMMITTEE. Ballots must be mailed in November. Scott then asked all copy be sent directly to the home of K6TI, 48 Mariposa Court, Danville, CA 94526. Lauren, WA6CIE, reported that the coffee fund has taken in \$73.27, and the raffle fund \$91.00. Discussion as to gifts for the Christmas party was then considered. (next page pse.)

Ham Radio Outlet

999 Howard Ave.
Burlingame, CA 94010
(415) 342-5757

2210 Livingston
Oakland, CA 94606
(415) 534-5757

Hours: 10 AM to 5:30 PM Monday—Saturday

KENWOOD - ICOM - YAESU
MOST MAJOR BRANDS/ITEMS
IN STOCK AT LOW DISCOUNT PRICES

SPECIALS	SALE
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MA-40 Tubular Crankup	\$549.95
MA-550 Tubular Crankup	899.95

(DISCOUNTS AVAILABLE ALL MODELS)

<u>ICOM</u>	
IC-3200 Dual Bander	\$479.95

<u>KENWOOD</u>	
TS-440s/AT HF W/Tuner	\$1019.95
TS-940/AT HF W/Tuner	\$1899.95

<u>YAESU</u>	
FT-757GX HF Transceiver	\$899.95

OUR ONLY BUSINESS IS HAM RADIO!

HAM RADIO OUTLET
HAS THE LARGEST
AMATEUR RADIO
INVENTORY IN CALIFORNIA

Prices subject to change without notice

Dick, KT6X, reported a net profit from the auction of \$480, the best EVER. Jay, KT6Y and Dick, KT6X, said there were 150 items handled at this affair. Discussion among the board members resulted in Mary, WI6Y, making a motion to raise the club charge for auctioning surplus equipment to a straight 10% Jay Caldis seconded and the vote carried the motion. George, WB6OfH, brought up the subject of club membership cards. Discussion revealed strong feeling for abolishing this requirement. Jay Caldis moved the cards be eliminated. Mary, W6IY, seconded and motion carried.

Meeting adjourned 2200 hours. Hank Berriman and his charming wife graciously served refreshments which were delicious. NEXT BOARD MEETING AT QTH OF K6TI, CARSON TAYLOR, AT 2000 HOURS, Tuesday, November 25.

Respectfully submitted,
Diane Whitten, KB6FHE

SATELLITE SCATTER ! ! !



OSCAR AO-10 who brought the first semi-synchronous ham satellite communications into reality is seriously ill. The ham experts who command it have done an outstanding job of keeping it alive. Radiation "hits" have destroyed many of the main memory cells and it is becoming increasingly difficult to get it to respond. Prognosis is not good for its recovery. At present it should not be used if it is heard. The batteries are in poor condition and the command stations endeavoring to bypass the destroyed cells and regain control need what little power remains. At this time it appears unlikely that AO-10 will recover. We can only look forward to Phase III C which is scheduled for launch in 1987.

THE BASE STATION

YOUR CONTRA COSTA HAM HEADQUARTERS
FOR YOUR AMATEUR RADIO NEEDS.

AEA	BENCHER	FERRITE RODS
AVANTI	BUTTERNUT	LARSEN
ASTRON	CALLBOOKS	HAM PUBLICATIONS
ARRL	COAX CABLE	MFJ NYE
AMECO	CONNECTORS	REGENCY
B & W	CUSHCRAFT	2 MTR AMPLIFIERS
BALUNS	GORDON WEST	WELZ METERS
BEARCAT	HUSTLER	SPEAKERS

YAESU

1839 East St. (across from Sattlers)

Concord, CA 94520 (415)685-7388

TO YOU de N6LGB:

I wish to publicly thank the following MDARC members for their assistance at the auction Oct.17th.: KT6X,Dick, KT6Y,Jay, WA6CIE,Lauren, WB6PQM,Scott, W6CPO,Larry, WI6Y,Mary, VE2AQV, Art. A special "Thank You to Art for his hard work and did you notice his slim figure?" And certainly thanks to all the many hams who brought outstanding gear to sell. Finally, I would be remiss if I did not say a great "Thank You Everyone" for bringing and spending your money. You found many fine bargains and helped the club to achieve the most successful auction to date. SCOTT N6LGB.

Renewing

Don't forget to renew your ARRL membership through the Club. Send us the card and money. We foreward to the ARRL and get to keep \$2.00.

TECHNICAL CHAIRMAN REPORT
RRRG of the MDARC
by
Rick Barber (WB6EZI)

Unless you've been chasing some rare DX you know that BOTH new repeaters are up and operational on the "hill". The 220 box went up on Saturday, October 18th and the two meter machine went up the following day. Installation of the 220 machine went smoothly... the '06 box is another story.

In converting the Motorola MICOR repeater from its design frequency range of 157 MHz to our frequency, I had to change many of the parts in the transmitter exciter and in the receiver front end sections. All went well in the changeover. When Keith tried to tune up the transmitter, however, one of the multiplier sections wouldn't respond to "tweaking". After triple-checking all the work I had done and verifying component conditions, Keith decided the only way to solve the problem was to completely rebuild the bad section.

Keith and I spent an unplanned 3 or 4 hours on the hill rebuilding the section. Tuneup then proceeded without a hitch. We got it working on Sunday night but didn't get a chance to get all the audio levels set properly. The voice synthesizer was too loud so the voice was shut off and the controller was placed into a CW-only mode. Two days later Keith got back up and made the necessary adjustments.

Both machines are doing very well. Initial tests and on-the-air reports indicate that we increased our coverage area substantially, both in total distance and in in-area (previously shadowed) coverage. Where they were marginal, they are now full quieting. Keith and I are now able to fully concentrate on the one remaining problem- interference from the 800 MC paging systems.

We have been in contact with the owners of the site and have asked for their assistance and have offered ours. We know where the problem originates generally, but there are so many 800 trunking and paging services on the hill, it may take a while to find the offending machine(s). We know our gear is clean but we can't find the dirty commercial rig. Ours is not the only box being hit. K6FOU, W6NKF, WA6YDP, and WA6EUZ are a few of the many machines being bothered by the interference. Hopefully, by the time you read this, the problem will have been found.

Many new and exciting things are in the works for the repeaters but I will save that information for another CARRIER. The next meeting of the RRRG will be on November 19th at the Pleasant Hill address of K6LXW. Stop by and join in the fun. Elections will be held for the coming year and a lot of HOT information will be disseminated.

73 fer now...

de Rick



"I DID clean up my desk . . . two years ago, just before I picked up that call from Russia."

ARES / RACES

Primarily for the information of our new MDARC members, I will list the check-in frequencies for our Contra Costa County Amateur Radio Emergency Service. Co Co Co. is part of the ARRL East Bay Section, Pacific Division with Dwayne Eskridge, W6LKE, as our SEC (Section Emergency Coordinator).

For our communication purposes the County is divided into Central, East, South and West portions; each headed by a separate Coordinator, (in order) KA6IVF, WA6ZFZ, K6TI, and N6DRT. Each has its own simplex 2 meter check-in frequency as follows:

Central 145.68 S South 147.55 S
East 146.54 S West 145.11/-R

We check-in at 1900 local time every Thursday and at 1920 we QSY to the WA6WVH repeater on 147.735/-R. Join us.....

The California Division of Forestry S.E.T. announced in last month's CARRIER was held as scheduled on Sunday, October 19. It began at 0905 local time with the announcement by Larry, W6CPO. The following operators checked in and took part by setting up at their assigned sites or travelling to the CDF Fire Stations at Del Valle (Livermore) and Sunol.

KD6CEC	KA6IVF	KA6SQN	WA6CIE
N6LGB	KB6UU	W6CPO	N6LJY
KB6UY	WA6DQN	W6LKE	WB6WZB
WB6EZI	WB6MZQ	KT6X	N6GPQ
N6NFR	WA6ZFZ	W6ZHY	

Communication was established with Morgan Hill (CDF HQS) and the mobile communications van at Henry Coe Park. The primary problem was 2 meter communication with Sunol as the Mt. Diablo repeaters could not make it there. The Sunol repeater (147.045) was used to cover that area.

Packet testing demonstrated problems as no contact could be made with Morgan Hill on the available path. We learned of the need for a portable digipeater in similar situations. We will work on that. The SET terminated at 1200 hours. Thanks to all who were able to participate.

73 W6ZHY HANK

EDUCATION CLASSES

As I stated in the last carrier the education classes will start for up-grading and new Amateur licenses in February 1987. The classes will be on Monday nights from 7:00 P.M. to 9:00 P.M. at College Park High School in Pleasant Hill. They will commence on February 2, 1987 and go to May 4, 1987, with two Holidays on February 16 and April 20, 1987. Currently there is plans to hold a one evening FCC testing session on Friday nite May 22, 1987 from 7:00 P.M. to 10:00 P.M..

As of this writing the instructors are the following. Mike Whitten, KB6FHC, Novice, Gene Capener, WW6H, Extra, Alan Rogers, N6LFN, General and Roger Horn, KI6HO, Advanced. Scott Thomas N6LGB and myself will do the Code instruction. I plan to have a meeting of all instructors in November or December do decide on instruction material needed so they can be ordered by the local amateur stores prior to the start of instruction.

There will be more up-dated instruction in the December and January Carriers. Get out the word and some announcements will be prepared for the various locations in the future. Thanks again for the instructors that have volunteered as without them there would have been no classes.

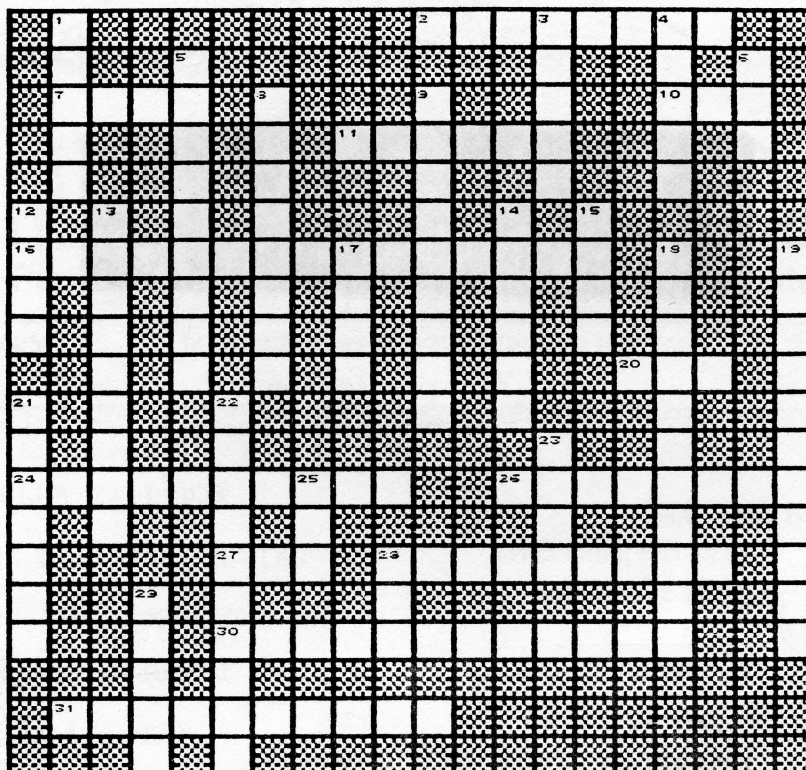
Speaking of volunteers, I made a plea in my last article for a volunteer for the Editor of this fine paper. Well I would like to take this space to thank Carson K6TI our new Editor. He needs you members to submit articles on anything interesting to Amateur Radio. Thanks Carson.

Jay D. Caldis KT6Y Education
Chairman



All renewals and change of addresses go to the Membership Chairman and NOT the Editor!

PACKET



ACROSS CLUES

2. DATE EQUIPMENT.
7. ONE OF THE FIRST ORGANIZATIONS TO PROMOTE PACKET. (ABBREVIATION)
10. CLEAR TO SEND (ABBREVIATION)
11. A NODE IN A NETWORK THAT TAKES INFORMATION FROM ONE FREQUENCY AND TRANSFERS IT TO ANOTHER.
16. A SYSTEM WHERE MESSAGES ARE RECEIVED, HELD UNTIL APPROPRIATE TIME & THEN SENT. (3 WORDS)
20. NAME USED BY ZILOG FOR ITS 8530 IC. (ABBREVIATION)
24. REFERENCE TO THE ACTUAL EFFECTIVE TRANSMISSION SPEED ON A PACKET CHANNEL.
26. A SET OF RULES. AX.25.
27. ACCESS DEVICE TO A LEVEL THREE PACKET NETWORK. (ABBREVIATION)
28. WHAT OCCURS WHEN TWO PACKET SIGNALS ARE DETECTED AT THE SAME TIME BY A RECEIVING STATION.
30. IN DATA COMMUNICATIONS, WHEN EACH CHARACTER IS SENT & RCVD INDEPENDENTLY FROM OTHER CHARACTERS.
31. CONDITION THAT EXISTS WHEN TWO PACKET STATIONS ARE LINKED TOGETHER.

DOWN CLUES

1. GROUP OF EIGHT BITS.
3. DEVICE USED TO TRANSMIT & RECEIVE DATA OVER A COMMUNICATIONS CHANNEL.
4. YOUR COMPUTER'S CODE. (ABBREVIATION)
5. AUDIO SHIFT KEYING.
6. A METHOD OF TRANSMISSION USED ON HF TO SEND PACKETS. (ABBREVIATION)
8. BIT PROTOCOL.
9. K9EI. AUTHOR OF GET***CONNECTED TO PACKET RADIO. (2 WORDS)
12. COLLISION AVOIDANCE SYSTEM. (ABBREVIATION)
13. COMPUTER
14. THE "R" IN NOVAM
15. A CHIP USED FOR VARIOUS FUNCTIONS UNIQUE TO PACKET. (ABBREVIATION)
17. BEGINS AND ENDS EACH FRAME.
18. DATA TERM FOR A BIT STREAM HAVING CONSTANT TIME INTERVALS BETWEEN SUCCESSIVE BITS.
19. WHAT THE RECEIVING STATION SENDS AFTER RECEIVING AN ERROR-FREE TRANSMISSION.
21. SERVER NODE THAT TRANSLATES INFO FROM ONE NETWORK INTO THE FORM OF ANOTHER. SIMILAR TO A BRIDGE.
22. ALL PACKETS STATIONS ARE CAPABLE OF ACTING AS ONE.
23. A ZERO IS A SHIFT. A ONE IS NO CHANGE. (ABBREVIATION)
25. PART OF THE INFO IN EACH FRAME OF TRANSMITTED DATA. (ABBREVIATION)
28. A MATHEMATICAL CALCULATION. IF THEY MATCH, THE PACKET IS VALID. (ABBREVIATION)
29. CIRCUIT THAT CONNECTS TWO NETWORKS. ALSO A PLACE WHERE YOU STORE OLD CLOTHES.

[illegible]

Mr. Diablo Amateur Radio Club,
From:
P.O. Box 28222
Pleasant Hill, Calif. 94523
Affiliated with the ARRL
Affiliated with the American Red Cross

The CARRIER

Volunteers are needed to help in the following areas before, during, and after the Christmas party:

1. Setting up tables and chairs the afternoon of the 21st.
2. Table decorating committee.
3. Accepting potluck dishes in kitchen, and setting out for dinner service.
4. Help making coffee, tea, and punch.
5. Cleanup (15-20 min.)

If you would like to participate in any of the above areas, please call George Roush, 687-0912.

[illegible]